

# The American Economic Review

VOLUME XVII

## BOARD OF EDITORS

J. M. CLARK  
JOHN IBE

F. H. KNIGHT                    E. M. PATTERSON  
E. G. NOURSE                    R. B. WESTERFIELD

## MANAGING EDITOR

DAVIS R. DEWEY

EVANSTON, ILL.  
AMERICAN ECONOMIC ASSOCIATION

1927

Copyright 1927  
AMERICAN ECONOMIC ASSOCIATION

## CONTENTS

### ARTICLES:

	PAGE	
Bargaining Power of Workers in the Glass Bottle Industry, Factors Affecting the .....	H. LA RUE FRAIN .....	429
Business Fluctuation in U. S., 1919-1925, Eco- nomics of .....	MONTGOMERY D. ANDERSON ..	230
Does Trade "Follow the Dollar"? .....	A. P. WINSTON .....	458
Economics on Enterprise, Orientation of .....	FREDERICK BARNARD HAWLEY ..	409
Entrepreneur, Function of the .....	CHARLES A. TUTTLE .....	13
Friedrich von Wieser .....	OSCAR Morgenstern .....	669
Going Value .....	BEN W. LEWIS .....	657
Going Value in Utility Valuation .....	M. C. WALTERSDORF .....	26
Governments, Economic Advisory Work for .....	E. W. KEMMERER .....	1
Inheritance Taxes, Economic Effects of .....	GLENN E. HOOVER .....	38
Interest Theory and Theories .....	H. J. DAVENPORT .....	636
Land Rent and Prices of Commodities .....	H. GORDON HAYES .....	219
McFadden Banking Act, The .....	H. H. PRESTON .....	201
Mathematics in Economic and Business Sta- tistics .....	W. L. CRUM .....	448
Rubber: A Case Study .....	WILLIAM ORTON .....	617
Salt Famine in Ecuador, A .....	F. W. FETTER .....	478

### COMMUNICATIONS:

Employee Stock Ownership, Distribution of .....	WILLARD C. FISHER .....	272
Tax Exemption of Government Bonds .....	VICTOR ROSEWATER .....	52
Wage Rates and Use of Machinery .....	GEORGE E. BIGGE .....	675
Wage Rates on Machine Use, Effect of .....	WILLIS WISSLER .....	50

### ARTICLES IN PROCEEDINGS (MARCH, 1927):

(in Supplement)

Accounts in Industrial Enterprises, Com- pulsory Publicity of .....	Q. FORREST WALKER .....	34
Banking Situation and Recent Corporate Financing .....	LEONARD L. WATKINS .....	36
Interest Theory and Price Movements .....	FRANK A. FETTER .....	62 ✓
Motor Transportation in the U. S. ....	J. E. SLATER .....	141
Railway Capital under the Transportation Act of 1920, Cost of .....	H. B. DORAU .....	25
Securities of Holding Companies and the Investor .....	W. F. GEPIHART .....	31
Round Table Discussions:		
American Practices Analogous to Foreign Controls over Raw Materials...Chairman, B. B. WALLACE .....	41	
Economic History .....	ISAAC LIPPINCOTT .....	10
Family Budgets .....	J. B. PEIXOTTO .....	132
Immigration Restriction—Economic Results and Prospects .....	EDITH ABBOTT .....	127
Marketing .....	L. S. LYON .....	48
Present Day Corporation Problems .....	M. LORENZ .....	25
Prohibition, The Economics of .....	IRVING FISHER .....	5
Public Utility Regulation, Problem of Effective .....	JOHN BAUER .....	123
Quantitative Method in Study of Economic Theory, Use of .....	HOLBROOK WORKING .....	18

REVIEWS OF BOOKS:

ACWORTH, Financial Reconstruction in England, 1915-1822. By M. S. Handman	69
Agricultural Problem in the U. S. By G. F. Warren	87
AIKMAN, Automobile Industry of Canada. By H. A. I.	508
ALBION, Forests and Sea Power: Timber Problem of the Royal Navy, 1652-1862. By H. L. Gray	286
ANDREAS, Bausteine zu einer Universalistischen Steuerlehre. By R. R. W.	726
ANGELL, Theory of International Prices. By O. Ingraham	480
ARNESON, Gateway to the Social Sciences. By A. P. U.	59
ARTMAN, Food Costs and City Consumers. By F. E. Clark	317
AUSSCHUSS zur Untersuchung der Erzeugungs- und Absatzbedingungen der Deutschen Wirtschaft. By W. N.	703
BARNETT, Machinery and Labor. By H. Jerome	329
BEARD and BEARD, The Rise of American Civilization. I. Agricultural Era. II. Industrial Era. By A. P. Usher	493
BENTON, Introduction to Marketing of Farm Products. By P. L. Miller	501
BIBLIOGRAFIA FASCISTA. By R. R. W.	80
BINGHAM and FREYD, Procedures in Employment Psychology. By C. L. Stone	99
BIRDSEYE, Arbitration and Business Ethics. By E. L. Heermance	95
BLACK, Introduction to Production Economics. By J. Ise	274
BONNET, Les Expériences Monétaires Contemporaines. By R. R. W.	340
BOULIATIAN, La loi de Variation de la Valeur et les Mouvements Généraux des Prix. By C. M. Walsh	278
BOWLEY and STAMP, The National Income, 1924. By H. Jerome	740
BRUMBAUGH, Direct Method of Determining Cyclical Fluctuations of Economic Data. By A. G. Silverman	740
BUKHARIN, Economic Theory of the Leisure Class. By M. G. Smith	683
BURGESS, The Urban Community. By A. B. Wolfe	545
BURNS, Wages and the State. By G. Watkins	531
BURTT, Principles of Employment Psychology. By C. L. Stone	100
CALHOUN, Ancient Greeks and the Evolution of Standards in Business. By E. L. Heermance	95
CALHOUN, The Business Life of Ancient Athens. By C. C. Plehn	288
CASSAU, The Consumers' Co-operative Movement in Germany. By J. G. Brooks	354
CATLIN, The Labor Problem in U. S. and Great Britain. By G. E. Barnett	330
CHADDOCK, Principles and Methods of Statistics. By E. B. Wilson	145
CLAPHAM, Economic History of Modern Britain. By A. P. Usher	694
CHLEPNER, La Banque en Belgique. By M. Nadler	121
CLARK, The Social Control of Business. By J. R. Commons	97
COMMONS and ANDREWS, Principles of Labor Legislation. By G. E. Barnett	336
CONRAD, Absatzmangel und Arbeitslosigkeit als Dauerzustand. By R. R. W.	511
COOMBS, Wages of Unskilled Labor in Manufacturing Industries in U. S., 1890-1924. By P. H. Douglas	533
COX, Economic Basis of Fair Wages. By A. G. S.	534
COYAJEE, India's Currency and Exchange Problems, 1925-1927. By R. B. Warren	537
CRUM and PATTON, Introduction to the Methods of Economic Statistics. By E. B. Wilson	145
DALZELL, Housing in Canada. By H. A. I.	730
DAMPIER-WIETHAM, Politics and the Land. By E. G. N.	707
DANIELS, George Unwin: A Memorial Lecture. By A. P. Usher	290
DAS GUPTA, Paper Currency in India. By M. N.	724
DAVIES, Investments Abroad. By G. W. Edwards	310
DAY, Distribution of Industrial Occupations in England, 1841-1861. By A. P. U.	699
DAY, Statistical Analysis. By E. B. Wilson	145
DEALEY, Foreign Policies of the U. S. By A. P. U.	71
DEAN, Philosophy of Fire Insurance. By F. E. Wolfe	735
DE FREMINVILLE, Evolution de l'Organisation Scientifique du Travail à propos de Congrès International de Bruxelles. By E. B. Dietrich	490
DE LA BLACHE, Principles of Human Geography. By A. B. Wolfe	135
DEWING, The Financial Policy of Corporations. By F. E. Armstrong	816
DICE, The Stock Market. By G. M. Janes	517

EDMINSTER, The Cattle Industry and the Tariff. By R. A. Clemen	297
EDWARDS, Investing in Foreign Securities. By W. F. Gephart	101
EIGELBERNER, Investigation of Business Problems. By H. B. Hastings	102
ELIOT, The Farmer's Campaign for Credit. By E. G. N.	704
ELLINGWOOD and COMBS, The Government and Labor. By E. Berman	110
ETTINGER and GOLIEB, Credits and Collections. By M. J. S.	320
FAIRCHILD, FURNISS and BUCK, Elementary Economics. By J. Ise	55
FAY, Elements of Economics. By J. I.	685
FISHER, The Famine in Soviet Russia, 1919-1923. By G. B. Mangold	736
FISCHER, Some Problems of Wages and Their Regulation in Great Britain since 1918. By W. B. Catlin	529
FOERSTER and DIETEL, Employee Stock Ownership in U. S. By E. Berman	534
FOLWELL, A History of Minnesota. By A. P. Usher	71
FORSEY, Economic and Social Aspects of Nova Scotia Coal Industry. By H. A. I.	506
FOSTER and CATCHINGS, Business without a Buyer. By C. S. Joslyn	713
FRASER, Foreign Trade and World Politics. By P. S. Peirce	93
FRY, American Villagers. By A. B. W.	137
GAVETT, First Course in Statistical Method. By E. B. Wilson	145
GILLESPIE, Labor and Politics in England, 1850-1867. By A. P. Usher	494
GILLMAN, Rent Levels and Their Causes. By W. H. Ten Haken	518
GOODLiffe, Credit and Currency. By M. N.	724
GROAT, Introduction to Study of Organized Labor in America. By F. T. Carlton	113
GUNN, Livelihood. By H. Heaton	686
HANTOS, La monnaie: Ses Systèmes et Ses Phénomènes en Europe Centrale. By M. Nadler	538
HARDY, Tax-Exempt Securities and the Surtax. By W. H. Rowe	540
HARGREAVES, Restoring Currency Standards. By A. P. Usher	122
HARRELL, Loyalism in Virginia. By A. P. Usher	72
HATFIELD, Accounting: Its Principles and Problems. By A. W. Hanson	714
HAYES, Recent Developments in the Social Sciences. By F. H. K.	686
HEALY and BRONNER, Delinquents and Criminals. By G. B. Mangold	139
HECKSCHER, Bidrag till Sveriges Economiska och Sociala Historia under och after Världskriget. By R. S. Saby	291
HEERMANCE, The Ethics of Business. By J. H. Tufts	103
HIRSCH, Das Amerikanische Wirtschaftswunder. By F. Flugel	73
HOOPINGARNER, Personality and Business Ability Analysis. By C. L. Stone	520
HOYT, Primitive Trade: Its Psychology and Economics. By F. H. Knight	73
HUNTER, Outlines of Public Finance. By F. T. Stockton	130
ISE, United States Oil Policy. By L. Logan	81
JACKMAN, Economics of Transportation. By E. J. Rich	304
JENKS, Migration of British Capital to 1875. By G. W. Edwards	310
JÉZE, Allgemeine Theorie des Budgets. By R. R. W.	727
JORDAN, Practical Business Forecasting. By C. A. Glover	741
KAUTSKY, Thomas More and His Utopia. By A. P. U.	700
KEMMERER and VISSERING, Report on Resumption of Gold Payments by the Union of South Africa. By W. O. Weyforth	123
KOHLER and MORRISON, Principles of Accounting. By J. P. Adams	520
KREBS, Outlines of Accounting. By M. J. S.	716
KRETSCHMANN, La Question Agraire in Russia. By R. R. W.	84
KUCZYNSKI, Deutschlands Versorgung mit Nahrungs und Futtermitteln. By W. A. Schoenfeld	705
KUZNETS, Cyclical Fluctuations, Retail and Wholesale Trade, 1919-1925. By O. Ingraham	738
LA DAME, Securing Employment for the Handicapped. By G. B. Mangold	548
LAIDLER, History of Socialist Thought. By G. B. L. Arner	737
LAIRD, The Psychology of Selecting Men. By C. L. Stone	521
LAUCK, Political and Industrial Democracy, 1776-1926. By E. Berman	337
LAVERGNE, L'Ordre Coopératif. By G. N. Tricoche	143
LEE, Business Ethics: A Manual of Modern Morals. By E. L. Heermance	95
LEIGHTON, The Individual and the Social Order. By G. M. Janes	60
LEWIS, Overseas Official Publications. By L. S. Turnbull	496
LEWISOHN, The New Leadership in Industry. By O. Tead	327
LINDSAY, Karl Marx's Capital. By J. E. LeRossignol	483
LINDSAY, Social Progress and Educational Waste. By G. B. Mangold	140

LORD, Fundamentals of Business Ethics. By E. L. Heermance	95
LORIA, <i>Economia Politica</i> . By R. R. W.	283
MCCARTY and ANTHONY, Survey Course in Accounting. By J. P. Adams	321
McGUIRE, Italy's International Economic Position. By W. Y. Elliott	696
MCPUHEE, Economic Revolution in British West Africa. By A. P. U.	75
MAEK, Foundations of Social Policy. By K. Fleek	687
MACKMURDO, The Human Life: Its Life and Law. By O. Ingraham	61
MAXWELL, Discriminating Duties and the American Merchant Marine. By M. S. Wildman	497
MEYER, The Seven Seals of Science. By F. H. K.	688
MENDELSON, Saturated Civilization. By O. Ingraham	293
MENGER, Das Bürgerliche Recht und die Besitzlosen Volksschichten. By R. R. W.	701
METCALF, Scientific Foundations of Business Administration. By N. G. Burleigh	514
Migration Movements, 1920-1923. By A. B. W.	138
MILLS, Vacations for Industrial Workers. By E. Berman	722
MILNES, The Economics of Wages and Labour. By P. Brissenden	333
MOHR, The Oil War. By W. F. Jones	84
MONTGOMERY, Income Tax Procedure, 1927. By C. C. Plehn	314
MOULTON and PASVOISKY, World War Debt Settlements. By H. E. Fisk	127
MUKERJEE, Rural Economy of India. By A. P. Usher	85
NEWBRIGG, Canada, the Great River, the Lands and the Men. By H. A. Innis	497
New York Stock Exchange. Report of Personnel Dept. By B. R. Andrews	339
NOGARO, Modern Monetary Systems. By M. Nadler	725
NOLAN, Monetary History of Ireland: Ancient Ireland. By N. S. B. G.	498
NORTON, Cooperative Movement in Social Work. By G. B. Mangold	731
OFFICIAL Publications of European Governments. By L. S. Turnbull	295
PATOUILLET, Les Codes de la Russie Soviétique. By A. Hewes	114
PATTERSON, Insurance Commissioner in the U. S. By F. E. Wolfe	735
PATTON, Diminishing Returns in Agriculture. By A. J. Dadisman	284
PEAKE, Academic Study of Some Money Market and Other Statistics. By A. G. Silverman	124
PEARL, The Biology of Population Growth. By A. B. Wolfe	347
PERIGORD, International Labor Organization. By G. S. Watkins	114
PERROUX, Le Problème du Profit. By P. R. Whitehead	61
PHILIPS, Foreign Expansion of American Banks. By G. W. Edwards	539
PIPKIN, The Idea of Social Justice. By M. G. Smith	689
REDFORD, Labour Migration in England, 1800-50. By A. P. U.	76
Regierungs-Entwurf eines Gesetzes über Arbeitslosenversicherung nebst Amtlicher Begründung. By F. E. Wolfe	353
REITTER, Profits, Dividends and the Law. By J. P. Adams	311
REMER, The Foreign Trade of China. By F. E. Lee	308
Report on Oriental Activities within the Province of British Columbia. By H. A. I.	729
Report of Royal Commission on Indian Currency and Finance. By W. R. Burgess and R. B. Warren	117
RIEGEL, Story of the Western Railroads. By I. Lippincott	91
ROBINSON, Investment Trust Organization and Management. By A. V. Shaw	105
RYAN, Distributive Justice. By M. G. Smith	690
SACK, Les Effets des Transformations des Etats sur Leurs Dettes Publiques. By R. R. W.	728
SAFOSS, Left Wing Unionism. By J. E. LeR.	338
SCHUMPETER, Theorie der Wirtschaftlichen Entwicklung. By O. Morgenstern	281
SECRIST, Introduction to Statistical Methods. By E. B. Wilson	145
SECRIST, The Widening Retail Marketing. By N. J. Silberling	314
SÉE, Economic and Social Conditions in France during the Eighteenth Century. By A. P. Usher	499
SHERMAN, Diplomatic and Commercial Relations of U. S. and Chile, 1820-1914. By A. P. U.	500
SHORTT, Documents relating to Canadian Currency, Exchange and Finance during the French Period. By H. A. Innis	125
SIEGFRIED, America Comes of Age. By G. O. Virtue	692
SIEGFRIED, Post-War Britain: A French Analysis. By M. B. Hammond	77
SIMON, Three Speeches on the General Strike. By G. S. Watkins	114
SLOAN, Security Speculation: The Dazzling Adventure. By L. Conant, Jr.	524
SMITH, The Tariff on Wool. By E. S. Mason	131

SMITH and DOWLING, Cases on the Law of Public Utilities. By C. S. Morgan	327
SODDY, Wealth, Virtual Wealth and Debt. By A. G. Silverman	275
SOMMER, Friedrich Lists System der Politischen Okonomie. By W. Notz	690
SPURR, Guiding Principles of Public Service Regulation. By C. S. Morgan	110
STAMP, Statistical Verification of Social and Economic Theory. By H. Jerome	742
STEWART, Canadian Labor Laws and the Treaty. By J. W. Macmillan	332
STOPES, Contraception. By N. E. Himes	728
STRIGL, Angewandte Lohntheorie. By O. Morgenstern	484
SUTHERN, Coal Miners' Struggle for Industrial Status. By G. M. James	115
SURANYI-UNGER, Die Entwicklung der Theoretischen Volkswirtschaftslehre. By O. Morgenstern	682
SURFACE, American Pork Production in the World War. By R. A. Clemen	503
SUTCLIFFE, Elementary Statistical Methods. By E. B. Wilson	145
TARRELL, The Life of Judge Gary. By I. Lippincott	78
TAWNEY, Religion and the Rise of Capitalism. By J. R. Commons	63
THOMAS, Economics of Small Holdings. By E. G. N.	707
THOMAS, Mercantilism and the East India Trade. By A. P. Usher	489
THORP and MITCHELL, Business Annals. By W. F. Mitchell	324
TOMIS, The Port of Montreal. By H. A. L.	510
UVEHARA, Industry and Trade of Japan. By A. P. U.	294
VAN WINTER, Het Aandel van den Amsterdamschen Handel aan den Ophouw van het Amerikaansche Gemeenbest. By R. S. Saby	702
WALSH, Four Kinds of Economic Value. By O. Ingraham	681
WARRASSE, Co-operative Democracy through Voluntary Association of the People as Consumers. By J. E. LeRossignol	355
WEATHERLY, Social Progress. By F. H. Knight	487
WEBBENGEN, Theorie des Ertrages. By R. R. W.	691
WEIGMANN, Kritischer Beitrag zur Theorie des Internationalen Handels. By J. W. Angell	488
Wheat Studies: American Importation of Canadian Wheat. By R. M. Green	88
Wheat Studies: Vol. II, Nos. 1-10. By H. B. Price	301
Wheat Studies: World Wheat Situation; Survey of Wheat Situation, 1926. By R. M. Green	302
Wheat Studies: McNary-Haugen Plan as Applied to Wheat. By R. M. Green	707
WHITE, Business Management. By H. L. Seward	107
WILCOX, The Indeterminate Permit in Relation to Home Rule and Municipal Ownership. By C. S. Morgan	525
WILLIAMS, Expansion of Rural Life. By G. M. James	86
WILLIAMS, Guide to Printed Materials for English Social and Economic History, 1750-1850. By A. P. Usher	79
WILLIAMS, Our Rural Heritage. By G. M. James	86
WOLFSON, The Woman Worker and Trade Unions. By A. Hewes	526
WOODBURY, Causal Factors in Infant Mortality. By A. B. Wolfe	133
WOODSON, Railway Accounting Procedure, 1927. By M. J. S.	108
WOODSON, Railway Accounting Procedure, 1928. By M. J. S.	718
WOTINSKY, Die Welt in Zahlen. By H. Jerome	742
WRIGHT, Readings in Money, Credit and Banking Principles. By W. O. Weyforth	126
YANG, Goodwill and Other Intangibles. By C. A. Glover	718

#### TITLES OF NEW BOOKS:

Accounting, Investments, and the Exchanges	98, 317, 516, 711
Agriculture, Mining, Forestry and Fisheries	83, 298, 506, 704
Capital and Capitalistic Organization	109, 326, 525, 721
Economic History and Geography	70, 289, 493, 698
General Works, Theory, and Its History	59, 282, 486, 683
Insurance and Pensions	142, 352, 550, 733
Labor and Labor Organizations	112, 336, 533, 721
Manufacturing Industries	89, 303, 508, 708
Money, Prices, Credit, and Banking	121, 339, 537, 723
Pauperism, Charities, and Relief Measures	354, 550, 736
Population and Migration	137, 350, 546, 728
Public Finance, Taxation, and Tariff	180, 343, 542, 726
Social Problems and Reforms	138, 350, 547, 729
Socialism and Co-operative Enterprises	144, 354, 551, 737

Statistics and Its Methods	148, 356, 551, 739
Trade, Commerce, and Commercial Crises	92, 308, 511, 710
Transportation and Communication	90, 306, 509, 709

#### PERIODICAL ABSTRACTS:

Accounting. By A. W. Hanson	165, 373, 562, 755
Agricultural Economics. By A. J. Dadisman	155, 363, 556, 749
Business Management	166, 374, 563, 756
Commerce. By H. R. Tosdal	159, 366, 558
Economic History, Foreign	154, 362, 555, 748
Economic History, United States. By Amelia C. Ford	152, 360, 554, 746
Insurance. By F. E. Wolfe	173, 388, 570, 767
Labor and Labor Organizations. By Walter J. Couper	167, 375, 564, 757
Money, Prices, Credit and Banking. By William O. Weyforth	170, 380, 566, 758
Pauperism, Charities. By George B. Mangold	174, 390, 769
Population. By A. B. Wolfe	386, 763
Public Finance. By Charles P. Huse	172, 384, 569, 761
Public Utilities. By Charles S. Morgan	162, 369, 560, 752
Railways and Transportation. By Julius H. Parmelee	159, 367, 558, 751
Statistics. By Harry Jerome	175, 391, 571, 769
Theory. By Morris A. Copeland	150, 358, 553, 744

#### DOCUMENTS, REPORTS, AND LEGISLATION:

Industries and Commerce	188, 395, 604, 773
Labor	192, 398, 606, 774
Money and Banking	775
Public Finance	191, 399, 606, 776
Public Utilities	190, 774

#### TWENTY-FOURTH LIST OF DOCTORAL DISSERTATIONS IN POLITICAL ECONOMY ..... 574

#### NOTES ..... 193, 401, 607, 777

DINNER IN HONOR OF PROFESSOR JOHN BATES CLARK, Supplement no. 2, June, 1927.

## CONTRIBUTORS

- Leading articles are marked (a); papers read at the annual meeting, published in the Supplement separately paged, are marked (s); communications (c); document notes (d); periodical abstracts (p); and all others are reviews.
- Abbott, E., 127 (s).  
Adams, J. P., 311, 321, 520.  
Anderson, M. D., 230 (a).  
Andrews, B. R., 339.  
Angell, J. W., 388.  
Armstrong, F. E., 316.  
Arner, G. L. B., 737.  
Barnett, G. E., 330, 336.  
Bauer, J., 123 (s).  
Bennett, O., 14 (s).  
Berman, E., 110, 337, 534, 722.  
Bigge, G. E., 675 (c).  
Bladen, V. W., 601 (d).  
Black, J. D., 43 (s).  
Brissenden, P., 333.  
Brooks, J. G., 354.  
Brosseau, A. J., 165 (s).  
Burgess, W. R., 117.  
Burleigh, N. G., 514.  
Carlton, F. T., 113.  
Catlin, W. B., 529.  
Clark, F. E., 318.  
Clemen, R. A., 297, 503.  
Commons, J. R., 63, 97.  
Comant, L., 524.  
Converse, P. D., 56 (s).  
Copeland, M. A., 150 (p), 358 (p), 553 (p), 744 (p).  
Couper, W. J., 167 (p), 375 (p), 564 (p).  
Crum, W. L., 448.  
Custis, V., 44 (s).  
Dadisman, A. J., 155 (p), 284, 363 (p), 556 (p), 749 (p).  
Davenport, H. J., 636 (a).  
Davison, J. F., 395 (d).  
Dietrich, E. B., 490.  
Dorau, H. B., 25 (s).  
Douglas, P. H., 533.  
Edwards, G. W., 310, 539.  
Elliott, W. Y., 696.  
Erdman, H. E., 42 (s).  
Fetter, F. A., 62 (s).  
Fetter, F. W., 478 (a).  
Ficek, K., 687.  
Fisher, C. O., 177 (d).  
Fisher, I., 5 (s), 106 (s).  
Fisher, W. C., 272 (c).  
Fisk, H. E., 127.  
Flugel, F., 73.  
Ford, A. C., 152 (p), 360 (p), 554 (p), 746 (p).  
Frain, H. L., 429 (a).  
Gephart, W. F., 101, 31 (s).  
Glover, C. A., 718, 741.  
Gras, N. S. B., 498, 10 (s).  
Gray, H. L., 286.  
Gray, H. M., 174 (s).  
Green, R. M., 88, 302, 707.  
Grimes, W. E., 42 (s).  
Hammond, M. B., 77.  
Hanch, C. C., 57 (s).  
Handman, M. S., 69, 16 (s).  
Hanson, A. W., 165 (p), 373 (p), 562 (p), 714, 755 (p).  
Hastings, H. B., 102.  
Hawley, F. B., 409 (a).  
Hayes, H. G., 219 (a).  
Heaton, H., 686.  
Heermance, E. L., 95.  
Hewes, A., 114, 526.  
Himes, N. E., 728.  
Hoover, G. E., 38 (a).  
Huse, C. P., 172 (p), 384 (p), 569 (p), 761 (p).  
Ingraham, O., 61, 293, 480, 681, 738.  
Innis, H. A., 125, 497, 506, 508, 510, 729, 730.  
Ise, J., 55, 274, 685.  
Janes, G. M., 60, 86, 115, 517.  
Jerome, H., 175 (p), 329, 391 (p), 571 (p), 740, 742, 769 (p).  
Jones, W. F., 84.  
Joslyn, C. S., 713.  
Karsten, K. G., 121 (s).  
Kemmerer, E. W., 1 (a).  
Knight, F. H., 73, 487, 120 (s), 686, 688.  
Lee, F. E., 308.  
Le Rossignol, J. E., 338, 355, 483.  
Lewis, B. W., 657 (a).  
Lippincott, I., 78, 91, 10 (s).  
Logan, L., 81.  
Lonsdale, J. G., 53 (s).  
Lorenz, M., 25 (s).  
Lyon, L. S., 48 (s).  
Macmillan, J. W., 187 (d), 332.  
Mangold, G. B., 139, 140, 174 (p), 390 (p), 548, 731, 736, 769 (p).  
Marx, R. S., 160 (s).  
Mason, E. S., 131.  
Miller, P. L., 501.  
Miller, S. L., 157 (s).  
Mitchell, W. C., 108 (s).  
Mitchell, W. F., 324, 113 (s).  
Morgan, C. S., 110, 162 (p), 327, 369 (p), 525, 560 (p), 752 (p).  
Morgenstern, O., 281, 484, 669 (a), 682.  
Nadler, M., 121, 538, 724, 725.  
Notz, W., 690, 703.

- Nourse, E. G., 704, 707.  
Orton, W., 617 (a).  
Palyi, M., 111 (s).  
Parmelee, J. H., 159, 367 (p), 558 (p),  
751 (p).  
Peirce, P. S., 92.  
Pelizzotto, J. B., 132 (s).  
Plehn, C. C., 288, 344.  
Preston, H. H., 201 (a), 13 (s).  
Price, H. B., 301.  
Riehl, E. J., 304.  
Rosewater, V., 52 (c).  
Rowe, W. H., 540.  
Ruggles, C. O., 39 (s), 167 (s).  
Saby, R. S., 291, 702.  
Schoenfeld, W. A., 705.  
Seligman, E. K. A., 19 (s).  
Seward, H. L., 107.  
Shaw, A. V., 105.  
Sheets, H. P., 51 (s).  
Slagmire, M. J., 108, 320, 716, 718.  
Silberling, N. J., 311.  
Silverman, A. G., 124, 275, 534, 740.  
Slater, J. E., 141 (s).  
Smith, M. G., 683, 689, 690.  
Stockton, F. T., 130.  
Stone, C. L., 99, 100, 520, 521.  
Taylor, A. E., 45 (s).  
Tead, O., 327, 496.  
Ten Haken, W. H., 518.  
Thompson, C. M., 11 (s).  
Tosdal, H. R., 159 (p), 366 (p), 558 (p),  
55 (s).  
Tricoche, G. N., 143.  
Trumbower, H. R., 171 (s).  
Tufts, J. H., 103.  
Turnbull, L. S., 295.  
Tuttle, C. A., 13 (a).  
Usher, A. P., 59, 71, 72, 75, 76, 79, 85,  
122, 290, 294, 489, 493, 494, 499, 500,  
694, 699, 700.  
Virtue, G. O., 692.  
Walker, Q. F., 34 (s).  
Wallace, B. B., 41 (s).  
Walsh, C. M., 278.  
Waltersdorf, M. C., 26 (a).  
Warren, G. F., 87.  
Warren, R. B., 117, 537.  
Watkins, G. S., 114, 531.  
Watkins, L. L., 36 (s).  
Weyforth, W. O., 123, 126, 170 (p), 380  
(p), 566 (p), 758 (p).  
Whitehead, R. R., 61, 80, 84, 283, 340,  
511, 691, 701, 726, 727, 728.  
Wildman, M. S., 497.  
Wilson, E. B., 145.  
Winston, A. P., 458 (a).  
Wissler, W., 50 (c).  
Wolfe, A. B., 133, 135, 137, 138, 347, 386  
(p), 545.  
Wolfe, F. E., 173 (p), 353, 388 (p), 570  
(p), 733, 735.  
Working, H., 18 (s).  
Wright, C. W., 12 (s).

85,  
500,

380

340,

386

570

$P_2^{\alpha} = 1$